

REMARKS

Claims 1, 2, 4-7 and 9-12 are pending in the application. Claims 1, 2, 4-7 and 9-12 are rejected. Claims 1 and 2 are herein amended. Claims 3 and 8 are herein canceled.

Specification

The Examiner asserts that Applicants' newly amended language in Claims 1 and 2 with respect to "area adjacent" in discussing the silver and tin solid solution in copper alloy does not appear to find antecedent support in the specification. Also, the Examiner asserts that Applicants' negative limitation discussed in the section 112, first paragraph rejection immediately below does not find support. Applicants address these objections below.

Claim Rejections - 35 U.S.C. §112

Claims 1, 2, 4-7 and 9-12 are rejected under 35 U.S.C. §112, first paragraph. The Examiner asserts that in claims 1 and 2, Applicants' recitation of "a second layer that is not directly adjacent to said backing metal" is new matter, because it comprises a negative limitation without antecedent support in the originally filed Specification.

Applicants respectfully disagree with this rejection, and note particularly Figure 1 in the specification, as well as the description of Figure 1 starting on page 11 of the specification. As can be seen in Figure 1, the invention comprises a backing layer (1) as well as an alloy (2,3). The alloy comprises several layers: a first (2) layer directly adjacent to the backing layer, and a second layer

(3) not directly adjacent to the backing layer. Thus, Applicants submit that Figure 1 provides a basis for this claim language.

Claims 1, 2, 4-7, and 9-12 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite.

Regarding Claim 1, the Examiner asserts that it is unclear what is meant by the phrase “wherein Ag and Sn are solid-dissolved the copper alloy . . .”. Applicants herein change this term to “wherein Ag and Sn are solid solution in the copper alloy...”. Applicants submit that this change clarifies the claims, and that the change is supported in the specification on page 8, lines 8-10.

The Examiner notes that Applicants’ claim 1 now claims a copper alloy that consists essentially of Ag, Sn and a balance that consists essentially of Cu, wherein the respective ranges in amounts of Ag and Sn are specified. Applicants’ claim 2 calls for a copper alloy that contains Ag, Sn, at least one additive element, and a balance that consists essentially of Cu, where the respective ranges in amounts of Ag, Sn, and at least one additive element are specified. The Examiner asserts that it is unclear whether this is open or closed composition language for claims 1 and 2.

Applicants herein make a clarification to the claims, so that claim 1 recites “a copper alloy consisting essentially of copper, from 0.1 to 2% by weight of Ag, and from 1 to 10% by weight of Sn, ~~the balance of the alloy consisting essentially of Cu~~”. Claim 2 is similarly amended to read “said sliding bearing consisting essentially of a copper alloy containing copper, from 0.1 to 2% by weight of Ag, from 1 to 10% by weight of Sn, and 10% by weight or less of at least one additive element selected from the group consisting of Sb, In, Al, Mg and Cd, ~~the balance of the alloy~~

~~consisting essentially of Cu~~". Applicants submit that such amendment should clarify the content of the claimed materials.

Regarding claims 1 and 2, the Examiner asserts that it is unclear what is the relationship, if any, between the "area adjacent said roughened surface" and the claimed first and second layers.

Applicants herein more clearly define this limitation as "wherein Ag and Sn are in solid solution with the copper alloy in at least the area of said second layer directly adjacent said roughened surface", which clarifies the relationship between the area adjacent the roughened surface and the second layer.

Regarding claim 2, in the last 'wherein' clause, the Examiner asserts that it is unclear what is the antecedent basis of the phrase "said additive element."

Applicants herein amend the claim to read: "wherein said second layer contains a component consisting of at least one of:

~~solid-dissolved~~ solid solution of Ag and Sn and at least one of said additive ~~element~~ elements,

a hexagonal compound of ~~solid-dissolved~~ solid solution of Ag and Sn and at least one of said additive ~~element~~ elements,

a hexagonal compound of ~~solid-dissolved~~ solid solution of Cu and Ag and Sn and at least one of said additive ~~element~~ elements,

a eutectic of ~~solid-dissolved~~ solid solution of Ag and Sn and at least one of said additive ~~element~~ elements, or

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a eutectic of Cu and ~~solid-dissolved~~ solid solution of Ag and Sn and at least one of said additive ~~element~~ elements."

In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees that may be due with respect to this paper to Deposit Account No. 01-2340.

Respectfully submitted,

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